

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

**REDUCED WATER AND ENERGY COFFEE CONVEYANCE
SYSTEM**

INTERIM STANDARD

**(No.)
Code 760**

DEFINITION

A mechanical device installed to process green-mature coffee berries with a reduced amount of water and energy.

PURPOSE

- To reduce by 50 percent the amount of water used for pulping and washing substances such as mucilage and pulp from fresh green-mature coffee berries.
- To reduce production of contaminant substances.
- To reduce use of energy.

CONDITION WHERE PRACTICE APPLIES

This standard applies where green-mature coffee berries are produced and a mechanical device is needed to process the berries; connecting to a system that transfers coffee by-products from source to storage/treatment facility.

The reduced water consumption coffee conveyance system is part of an agricultural residue management system.

CRITERIA

Criteria for all purposes

Components of this standard shall comply with all federal, state, and local laws, rules and regulations.

Structures – All structures, including those which provide a work area around the coffee equipment will be designed to withstand the anticipated static and dynamic loading.

Conduits – Gravity or electrical conveyors used for emptying coffee berries into the equipment shall be designed in accordance with Interim Conservation Practice Standard Crop By-products Transfer (759).

Safety – The system shall consider OSHA requirements for the safety of laborers during and after the construction, installation, operation and maintenance of the system.

Structures shall be provided with covers or barriers such as gates, fences, or other exclusion means in accordance with Conservation Practice Standard Use Exclusion (472). Equipment placement shall be in a well-ventilated area and signs shall be provided to warn of the danger of entering the facility and reduce the risk of mechanical injuries or electrification.

Criteria in support of the purpose of crop by-products conveyance

Gravity discharge conveyors used for emptying or disposing of crop by-products shall be consistent with Interim Conservation Practice Standard Crop By-products Transfer (759).

CONSIDERATIONS

- Utilization of topography to generate head to reduce pumping or emptying requirements.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service
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- Economics (including conservation practice life span), processor design, and health and safety factors.
- Possible contamination of domestic water systems and ground water.
- Loading and unloading equipment in the vicinity of the coffee plant.
- Provisions for electric power supply.
- Provisions for water supply.
- Sanitation needs for all equipment that leaves the farm and working area in order to prevent the spread of a disease or pests.

PLANS AND SPECIFICATIONS

Plans and specifications for installing this equipment shall be in accordance with this standard and design specifications, and shall describe the requirements for applying the practice to achieve its intended purpose.

OPERATION AND MAINTENANCE

Operation and maintenance shall be in accordance with the requirements specified in overall operation and maintenance plan required by the applicable practice components.

SPECIAL CONSIDERATIONS

The equipment must be maintained and operated following the manufacturer's specifications for the machinery. Funds provided from NRCS to users, for the acquisition of this equipment does not imply an endorsement to any specific brand or product but to the results of an adequate operation, reduction in water and energy consumption and reduction of pollutants. Machinery operation must comply with safety rules and regulations established by OSHA. A wrong operation or fault in following safety instructions by the operator may cause or produce adverse results. NRCS is not responsible for these or any damage to third persons or operators for any negligent or deficient operation no matter if the operator is owner, an employee or an authorized agent by the owner.